



## REMARKS / ARGUMENTS

Claims 1 to 5 and 7-16 are pending in the application.

Claims 1-5, 7-8 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hardeman et al. (U.S. 5,267,488) in view of Machida et al. (U.S. 4,719,812). The rejection of claims 1-5 in particular is based on the Examiner's reading of claims 1-5 on a combination of selected features of Hardeman's "Drive Train Conversion Apparatus" and Machida's "Transmission Casing Including a Hydraulic Clutch".

Applicants respectfully disagree with the Examiner's findings regarding Hardeman et al. at least where the Examiner writes that:

*"Hardeman discloses a motor vehicle (V) comprising .....a clutch actuator device, the clutch actuator device including a clutch release device (36) with a clutch release drive source (62)."*

*"Hardeman et al. further discloses ....., a control device...."*

*"The control device is operable to control the clutch in an automated mode",*

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*“The clutch release drive source and the clutch release device are both integrated in the carrier element (see col. 5, lines 5-8)”.*

In response to the foregoing statements by the Examiner, Applicants note that according to Hardeman et al., col. 4, line 68, to col. 5, line 4, the release bearing 36 is operating conventionally by apparatus including a lever (not shown) projecting from an operating shaft 62 housed in a bore 64 located in the adapter housing 10. The term “conventionally” in the context of an “early Volkswagen” (see col. 4, line 35), can only mean that the clutch is a “manually” operated clutch, as is also stated in col. 3, line 10 of the Hardeman reference. This view is further supported by the fact that Hardeman lacks a control device that is operable to control the clutch in an automated mode, as required by claim 1 of the present application. Thus, contrary to the Examiner’s findings:

- Hardeman has no clutch release drive source other than the driver's foot.
- Hardeman has no control device operable to control the clutch in an automated mode.
- Hardeman's "clutch operating means" which the Examiner found to be "provided integrally with the adapter housing 10" (col. 5, lines 5-8) obviously cannot include a drive source as required in claim 2 of the present application.

Applicants also respectfully disagree with the Examiner's finding that



*"Machida et al. teaches an automatic clutch actuator device (3) comprising hydraulic conduits and hydraulic elements such as a valve and cylinder (11, 12, 13, 17)."*

Based on a careful analysis of the Machida et al. reference, Applicants found that Machida's elements 11, 12, 13 are hydraulic cylinders arranged on the outside of the transmission housing to operate the change speed mechanisms A and B (col. 2, lines 34-37) and that element 17 is a hydraulic valve for the manual operation of the forward/backward switching device C (col. 2, lines 54-57). A hydraulically operated multi-disk clutch 3 is referred to in col. 2, lines 16-17. A flow passage 38a for supplying oil to the clutch 3 is referred to in col. 4, lines 9-11. The flow passage 38a appears to lead into a concentric clutch release cylinder inside the clutch itself. Thus, Machida's clutch actuator device in the form of the concentric clutch release cylinder and piston is integrated in the clutch itself. Consequently, Machida et al. does not conform to claim 1 of the present application which requires that *"at least portions of at least one of the clutch-actuator device and the control device are integrated in the carrier element; and said carrier element is arranged in an intermediate area between the clutch bell housing and the transmission housing"*. Machida's multi-disk clutch with an actuator piston integrated in the clutch requires a more space-consuming design of the clutch and is thus a prime example for exactly the kind of problem that the present invention aims to solve. (See page 2 of the specification: *"Thus, a large number of components need to*



*be arranged in the clutch bell housing, which leads to problems due to space limitations.”)* .

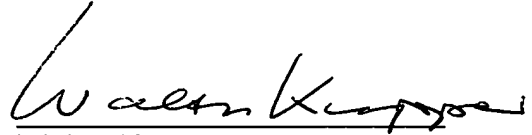
A skilled-in-the-art person contemplating a combination of Hardeman et al. with Machida et al. would find no suggestion leading towards the solution proposed by the present invention. Hardeman alone already immensely increases the axial length of the power train. Machida at least requires more axial space than the solution proposed in the present invention. Thus, a skilled-in-the-art person looking for a solution to solve the “*problems due to space limitations*” as described in the present application would have no reason to combine Hardeman et al. with Machida et al. in order to solve those problems.

As a conclusion of the foregoing argument, Applicants respectfully assert that Hardeman et al. and Machida et al., whether considered individually or in any combination, would have been rejected by any skilled-in-the-art person as unsuitable to provide a solution in accordance with claim 1 of the present application and therefore fail to meet the criteria for making claim 1 of the present application unpatentable under 35 U.S.C. 103(a). Consequently, the rejection of claim 1 as being unpatentable over Hardeman et al. (U.S. 5,267,488) in view of Machida et al. (U.S. 4,719,812) should be withdrawn and, since there are no further grounds for rejection, claim 1 should be allowed. Furthermore, the rejections against dependent claims 2 to 5 and 7 to 16 should be considered a moot issue, as these claims should be allowed by virtue of their dependency on the presumably allowable claim 1.



Applicants respectfully submit that all issues of the Office Action of July 9, 2003 have been appropriately addressed by the foregoing Remarks. Allowance of the present application with claims 1 to 5 and 7 to 16 is hereby earnestly solicited.

Respectfully submitted,



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Attachments:      Petition for one-month extension and fee payment